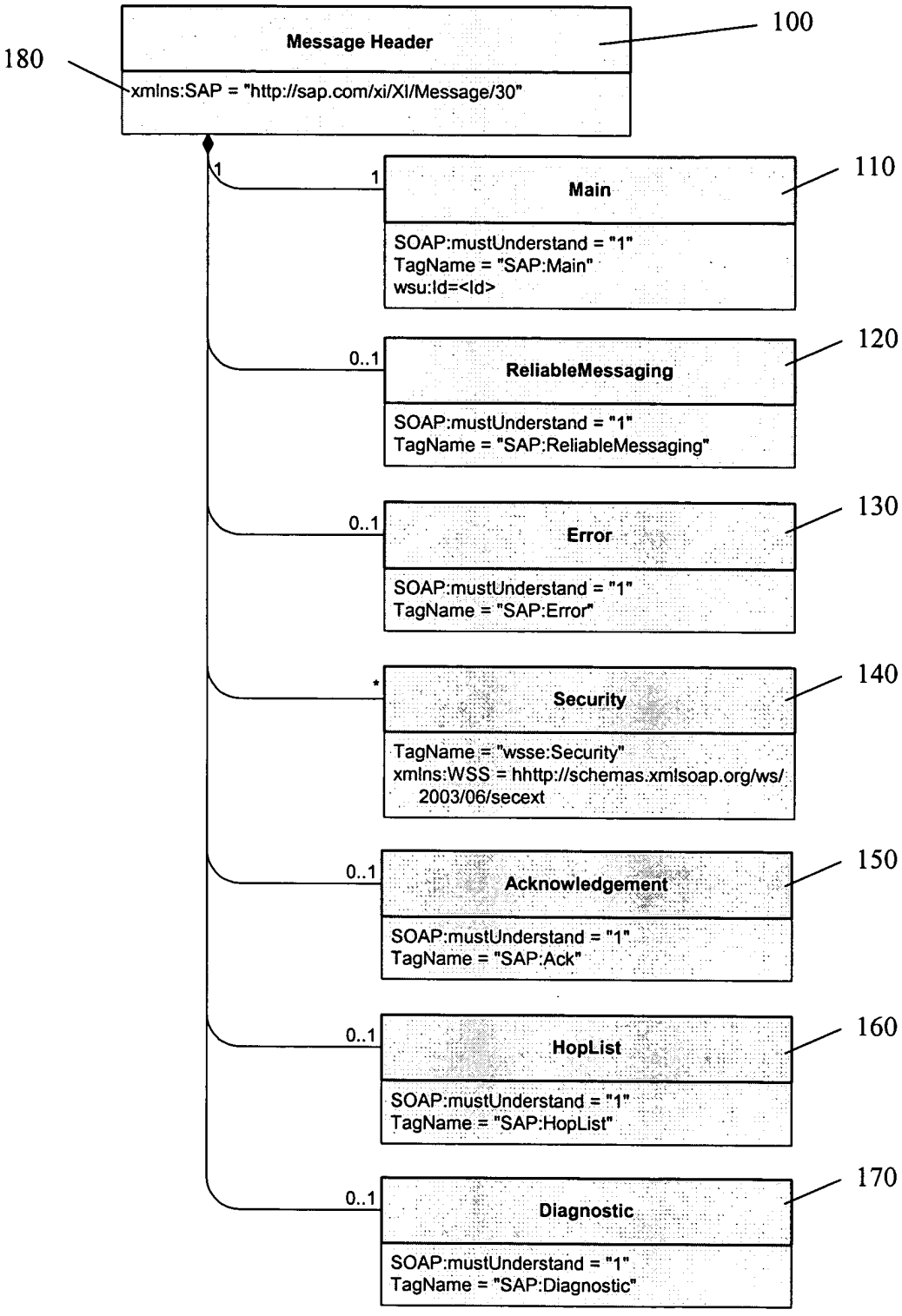
Message Header
100
180
xmlns:SAP = "http://sap.com/xi/XI/Message/30"
1
1
Main
110
SOAP:mustUnderstand = "1"
TagName = "SAP:Main"
wsu:Id=<Id>
0..1
ReliableMessaging
120
SOAP:mustUnderstand = "1"
TagName = "SAP:ReliableMessaging"
0..1
Error
130
SOAP:mustUnderstand = "1"
TagName = "SAP:Error"
*
Security
140
TagName = "wsse:Security"
xmlns:WSS = hhttp://schemas.xmlsoap.org/ws/
2003/06/secext
0..1
Acknowledgement
150
SOAP:mustUnderstand = "1"
TagName = "SAP:Ack"
0..1
HopList
160
SOAP:mustUnderstand = "1"
TagName = "SAP:HopList"
0..1
Diagnostic
170
SOAP:mustUnderstand = "1"
TagName = "SAP:Diagnostic"

FIG. 1

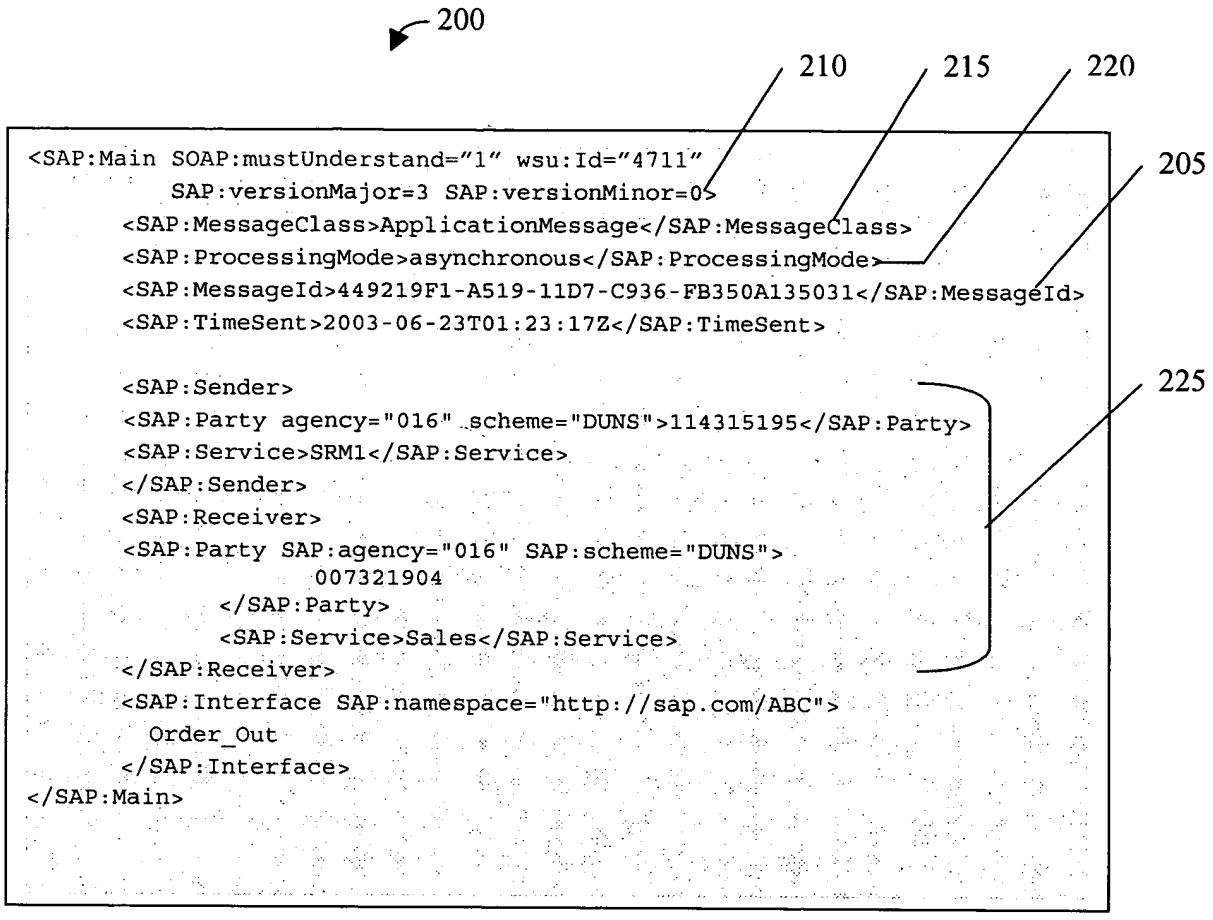
200
210
215
220
205
225
<SAP:Main SOAP:mustUnderstand="1" wsu:Id="4711"
SAP:versionMajor=3 SAP:versionMinor=0>
<SAP:MessageClass>ApplicationMessage</SAP:MessageClass>
<SAP:ProcessingMode>asynchronous</SAP:ProcessingMode>
<SAP:MessageId>449219F1-A519-11D7-C936-FB350A135031</SAP:MessageId>
<SAP:TimeSent>2003-06-23T01:23:17Z</SAP:TimeSent>
<SAP:Sender>
<SAP:Party agency="016" scheme="DUNS">114315195</SAP:Party>
<SAP:Service>SRM1</SAP:Service>
</SAP:Sender>
<SAP:Receiver>
<SAP:Party SAP:agency="016" SAP:scheme="DUNS">
007321904
</SAP:Party>
<SAP:Service>Sales</SAP:Service>
</SAP:Receiver>
<SAP:Interface SAP:namespace="http://sap.com/ABC">
Order_Out
</SAP:Interface>
</SAP:Main>

FIG. 2

Header	**Message Class**		
	Application-Message	**Application-Response**	**ApplicationError**
Main	X	X	X
Error	–	–	X
ReliableMessaging	X	–	–
Ack	–	–	–
HopList	Conditional: If TransportAckRequested or ApplicationAckRequested is equal true	–	–
Security	Conditional: If authentication required	Conditional: If authentication required	–
Diagnostic	Conditional	Conditional	Conditional
Type			
'Application'	X	X	Conditional: Depends on application
'ApplicationAttachment'	Conditional: If attachment provided by sender	Conditional: If attachment provided by sender	–
'System'	Conditional: If message tracing is switched on	Conditional: If message tracing is switched on	Conditional: If message tracing is switched on
Protocol Invariants			
Main/ ProcessingMode	synchronous, asynchronous	synchronous	synchronous
Main/ RefToMessageId	arbitrary, but must be valid MessageId of another ApplicationMessage	Must be the messageId of the corresponding ApplicationMessage	Must be the messageId of the corresponding ApplicationMessage
Error/Code	N/A	N/A	'APPLICATION'
Error/Fault	N/A	N/A	Applications fault interface

FIG. 3

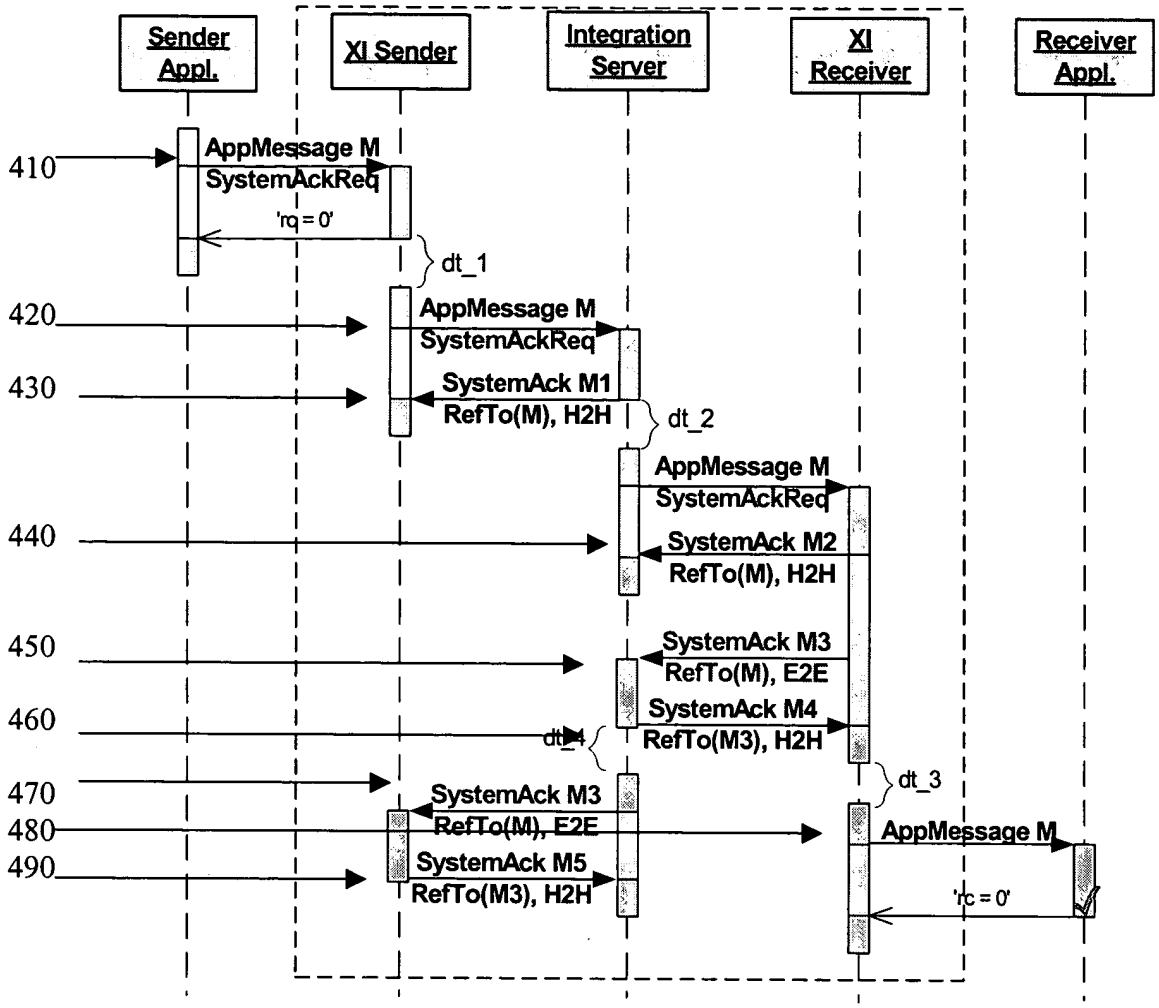
Sender Appl.
XI Sender
Integration Server
XI Receiver
Receiver Appl.
410
AppMessage M
SystemAckReq
'rq = 0'
dt_1
420
AppMessage M
SystemAckReq
430
SystemAck M1
RefTo(M), H2H
dt_2
AppMessage M
SystemAckReq
440
SystemAck M2
RefTo(M), H2H
450
SystemAck M3
RefTo(M), E2E
460
SystemAck M4
RefTo(M3), H2H
dt_4
dt_3
470
SystemAck M3
RefTo(M), E2E
480
AppMessage M
490
SystemAck M5
RefTo(M3), H2H
'rc = 0'

FIG. 4

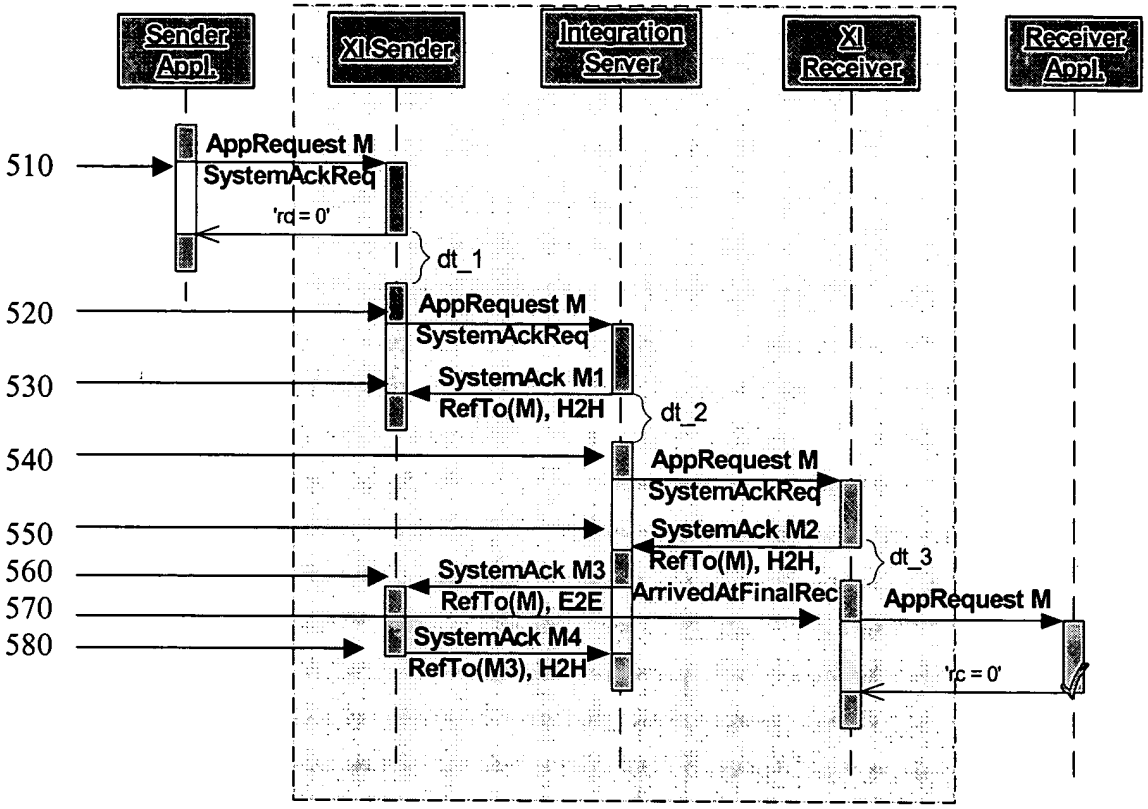
Sender Appl.
XI Sender
Integration Server
XI Receiver
Receiver Appl.
510
AppRequest M
SystemAckReq
'rq = 0'
dt_1
520
AppRequest M
SystemAckReq
530
SystemAck M1
RefTo(M), H2H
dt_2
540
AppRequest M
SystemAckReq
550
SystemAck M2
RefTo(M), H2H,
ArrivedAtFinalRec
dt_3
560
SystemAck M3
RefTo(M), E2E
570
AppRequest M
580
SystemAck M4
RefTo(M3), H2H
'rc = 0'

FIG. 5